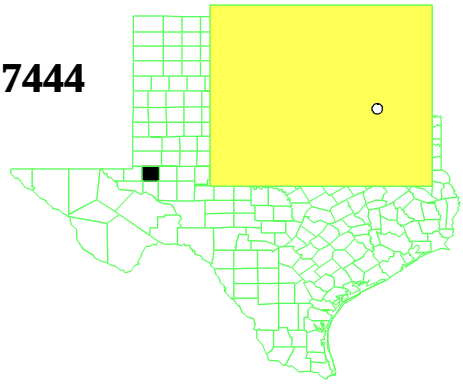
SPRAGUE ROAD
TEXAS
EPA ID# TX0001407444



EPA REGION 6
CONGRESSIONAL DISTRICT 19
Ector County
Odessa

Updated:

October 1, 2002

Site Description

Location: Ector County, Texas; immediately north of the Odessa City limits.

Population: The population within ½ mile of the site is approximately 400; the population within 1 mile of the site is approximately 400; the population within 4 miles of the site is approximately 18,600.

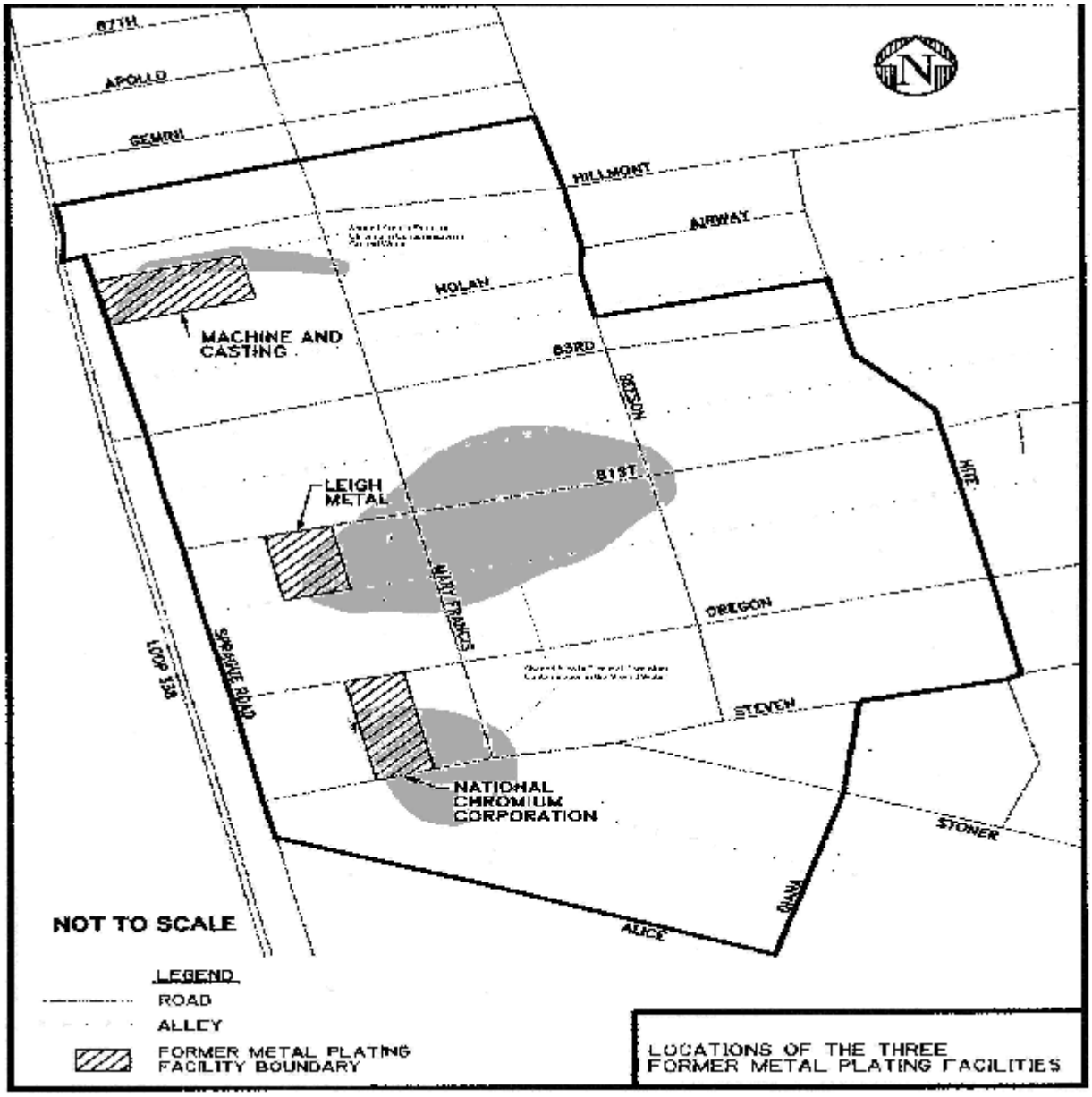
Setting: The site consists is approximately180 acres in size and consists of three separate inactive or abandoned chromium plating facilities within a 1/3 mile area - Leigh Metal Plating, Inc., National Chromium Corporation, and Machine and Casting, Inc. The individual facilities are less than 4 acres in size and located in a residential and light industrial area. Three plumes of chromium contaminated ground water are present at the site. The largest of the three plumes originates from the Leigh Metal Plating Inc. facility; the next largest plume originates from the National Chromium Corporation facility; the smallest plume originates from the Machine and Casting, Inc. facility. The site is a mixture of light to medium commercial operations with private residences mixed throughout the area. While some private residences are connected to the Odessa public water supply system, the majority of residences are dependent on a single, high-quality aquifer for their drinking water.

Hydrology: The Trinity aquifer is the only source of high-quality drinking water in the site area. The water table in the unconfined aquifer is present at approximately 85 feet below the ground surface. The base of the aquifer is present at approximately 145 feet below ground surface. The Triassic red beds form the base of the aquifer. Private wells yield an average of 24 gallons per minute. The City of Odessa has 25 public water supply wells within 4 miles of the site that yield an average of 167 gallons per minute.

Wastes and Volumes

- Ground water contamination is from hexavalent chromium at all three facilities. The extent of the chromium contamination is illustrated by the shaded areas in the site map. A contaminant plume originates from each of the three facilities and extends in an easterly or southeasterly direction.

Site Map and Diagram



Site Assessment and Ranking

NPL LISTING HISTORY
Proposed Date: 04/01/97
Final Date: 09/25/97

The Remediation Process

Site History:

- The past chrome plating operations are potential sources of a ground water contaminant plume containing chromium. The ground water serves as a source of drinking water in the area and chromium has been detected in seven private residential wells above the Maximum Contaminant Level. In 1993, permanent water distribution lines from the city of Odessa were installed to residents affected by the ground water contamination from Leigh Metal and Plating facility. Residents who are not connected to the public water supply lines still rely on private residential well water.
- In 1996, EPA conducted a response action by removing solid and liquid wastes at the Leigh Metal and Plating and National Chromium facilities; contaminated soil at the National Chromium facility was also removed. EPA also investigated the ground water contamination near the three facilities by installing twelve monitoring wells and collecting 40 water samples from monitoring wells and nearby private water supply wells. Sample analyses indicate that a chromium contaminant plume is present near the three facilities in concentrations exceeding the Maximum Contaminant Level. The size of the chromium plume has been estimated to be approximately 180 acres.
- Removal actions by EPA resulted in 6,620 gallons of liquid and solid wastes, 156,320 pounds of vat and tank liquid and sludge, and 5,187,340 pounds of soil being removed from this site.

Health Considerations:

- Chromium in the ground water poses a risk to residents in the area dependent on private water wells for drinking water. Chromium concentrations off-site from the three facilities exceed the MCL of 0.1 mg/L. The private residences and businesses in the vicinity of Leigh Metals are connected to the Odessa City water supply. Private residences in the vicinity of National Chromium and Machine and Casting still utilize private water wells.

Record of Decision

Signed: 9/29/00

Community Involvement

- Community Involvement Plan: Developed 11/97
- Open houses and workshops: 04/98, 07/98
- Proposed Plan Fact Sheet and Public Meeting:
- ROD Fact Sheet:
- Milestone Fact Sheets: 10/97
- Constituency Interest:
- Site Repository: Ector County Public Library in Odessa, Texas

Technical Assistance Grant

- Availability Notice: 10/97
- Letters of Intent Received: None
- Draft Application Received: N/A
- Grant Award: N/A
- Current Status: Available

Contacts

- **EPA Remedial Project Manager:** Vincent Malott, 214-665-8313 or 1-800-533-3508
- **EPA Community Involvement:** NA
- **EPA Attorney:** Anne Foster, 214-665-2169
- **EPA Region 6 Ombudsman:** Arnold Ondarza, 303-312-6777
- **EPA Contractor:** Tetra Tech EM, Inc.
- **TCEQ Project Manager:** Diane Poteet, 512-239-2502

Enforcement

- General Notice letters sent to 2 Potentially Responsible Parties (PRPs) - 05/21/98

Present Status and Issues

- EPA received funding to begin construction at the Site and the activities will take place in two phases. Phase 1 will start on October 14, 2002 with the installation of ground water extraction and injection wells. The second phase will begin in January 2003 with the treatment plant and associated piping and electrical work.
- EPA conducted a site-wide ground water sampling event in July 2002 to update the contaminant plume boundaries and ensure the extraction well capture zones remain sufficient to recover the contaminants.
- EPA selected a ground water pump and treat remedy in the September 2000 Record of Decision for the chromium contamination in the ground water. Extraction wells will be installed to pump the water to the surface and then piped back to a central treatment plant located at the former Leigh Metal facility. Injection wells or dry wells will be installed at each of the former facilities to return the treated water to the aquifer. An area at the former National Chromium facility with high chromium concentrations remaining in the soil will be flushed out utilizing treated water from the treatment plant. Additional field work was completed in March 2001 to refine the treatment plant design and ground water extraction system.
- EPA installed water supply lines to those residences with contaminated water wells.

Benefits

- Remediation of the ground water contamination will allow unrestricted use of the aquifer, a primary source of water for drinking and irrigation in the local community.